

इंटरनेट

मानक

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“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 8722 (1978): Fish bolt with square head for collieries  
[PGD 31: Bolts, Nuts and Fasteners Accessories]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”



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Indian Standard

SPECIFICATION FOR  
FISH BOLTS WITH SQUARE HEAD FOR COLLIERIES

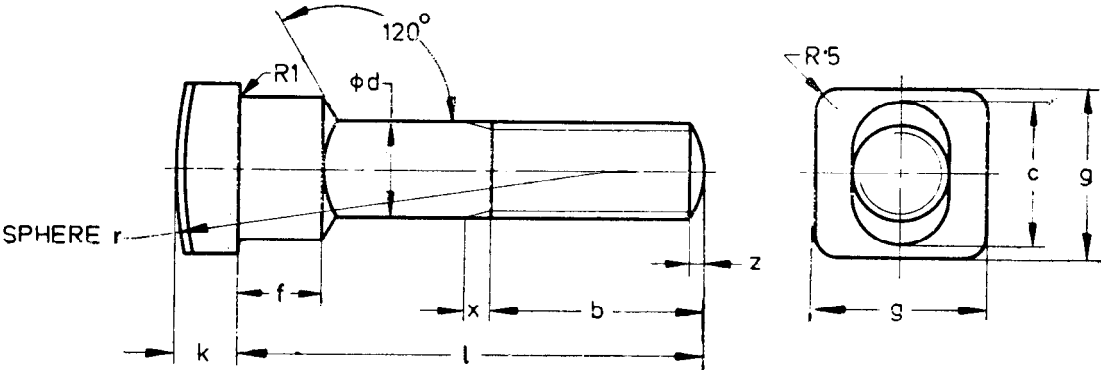
1. **Scope** — Covers the requirements of fish bolts with square head for use in collieries in the diameter range 16 to 24 mm.
2. **Types** — Two types of fish bolts with square head are covered as given below:  

Type I — Fish bolts with square head with oval neck, and

Type II — Fish bolts with square head without oval neck.
3. **Dimensions** — As given in Tables 1 and 2.

TABLE 1 DIMENSIONS OF FISH BOLTS WITH SQUARE HEAD (TYPE I)

All dimensions in millimetres.



z according to IS : 1368-1967 'Dimensions of ends of bolts and screws (first revision)'.  
x according to IS : 1369-1975 'Dimensions of screw thread runout and undercuts (first revision)'.

Nominal Size	d Nom ±IT15	c h15	b + 2p†	f ±½IT17	g	k js17	r	l ±½IT17
M16	16	22	27	8	27	12	50	(55) 60 65
M20	20	26*	44	15	32	14	70	90
			49					100
		30	44					90
( M22 )	22	33	49	17	39	16	100	100
								105
								115
								120
								130

Note — Size and length in parentheses are of second preference.

\*For bolts used as replacements.  
†p is the pitch of screw thread.

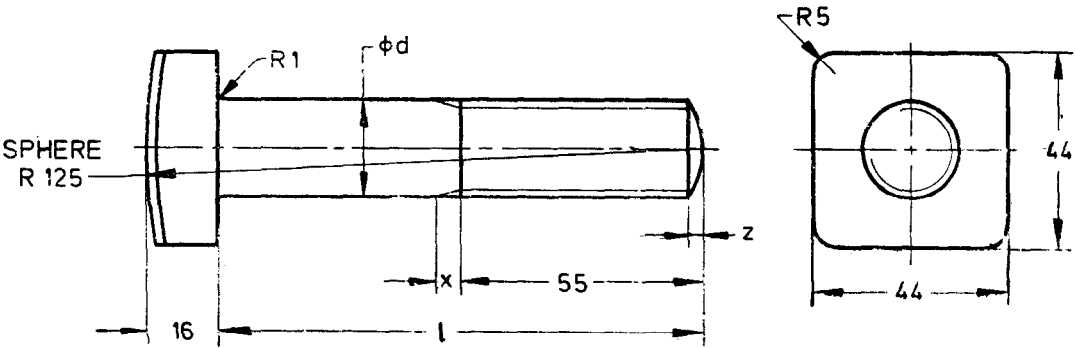
4. **Grade** — Black grade (B) as specified in IS : 1367-1967 'Technical supply conditions for threaded fasteners (first revision)'.

Bolts, Nuts and Fasteners Accessories Sectional Committee, EDC 27 [ Ref : Doc : EDC 27 ( 2641 ) ]

TABLE 2 DIMENSIONS OF FISH BOLTS WITH SQUARE HEAD (TYPE II)

( Clause 3 )

All dimensions in millimetres.



z according to IS : 1368-1967.

x according to IS : 1369-1975.

Nominal Size	d Nom $\pm IT15$	l $\pm \frac{1}{2} IT17$
( M22 )	22	110 120
M24	24	105 110 115 120 125 130 140 145 150 160 165 200

**Note 1** — Size in parentheses is of second preference.

**Note 2** — Tolerances which are not listed for dimensions in the figure are the same as for Type I.

5. Designation

5.1 Fish bolts with square head with oval neck shall be designated by the name, nominal size, length, width and number of this standard.

Example:

A fish bolt with square head of type I of nominal size M20, length 100 mm and width 26 mm ( see dimension c in Table 1 ) shall be designated as:

Fish Bolt Type I M20  $\times$  100  $\times$  26 IS : 8722

5.2 When the bolts are required with nuts ( see 8.1 ), they shall be designated as below.

Example:

A fish bolt with square head of Type I of nominal size M20, length 100 mm and width 26 mm with nut shall be designated as:

Fish Bolt Type I M20  $\times$  100  $\times$  26 N IS : 8722

**5.3** When fish bolts with square head without oval neck are required with hexagon nut with collar ( see 8.2 ), they shall be designated as below:

*Example:*

A fish bolt with square head of Type II of nominal size M24 and length 110 mm with collar nut shall be designated as:

Fish Bolt Type II M24 × 110 N IS : 8722

**6. Mechanical Properties** — Property class 4.6 of IS : 1367-1967.

**7. Sampling** — Sampling and criteria of acceptance shall be in accordance with IS : 2614-1969 'Methods for sampling of fasteners ( *first revision* )'.

## **8. General Requirements**

**8.1** Nuts used with fish bolts with square head with oval neck shall conform to the requirements as specified in IS : 1363-1967 'Specification for black hexagon bolts and lock nuts ( dia 6 to 39 mm ) and black hexagon screws ( dia 6 to 24 mm ) ( *first revision* )'.

**8.2** Hexagon nuts with collar used with fish bolts with square head without oval neck shall conform to the requirements as specified in IS : 7795-1975 'Specification for hexagon nuts with collar'.

**8.3** In regard to requirements not covered in this standard, the fish bolts shall conform to the requirements laid down in IS : 1367-1967.

**9. ISI Certification Marking** — Details available with the Indian Standards Institution.

## **EXPLANATORY NOTE**

Fish bolts of other types, namely, fish bolts with round head and oval neck are covered in a separate Indian Standard.

Product grade specified as Black grade (B) in 4 would correspond to product grade C as specified in the revision of IS : 1367 'Technical supply conditions for threaded steel fasteners: Part II Product grades and tolerances ( *second revision* )' which is to be published in due course.

In the preparation of this standard, considerable assistance has been derived from DIN 5903 Blatt 2-1967 'Laschenschrauben mit Vierkantkopf' (Fish bolts with square head), issued by Deutsches Institut für Normung.